

### **REMARKS**

As amended above, claims 1-98 are currently pending in this application. Claims 1, 40-46, and 88-98 have been amended.

In the Action, claims 1, 40-41, 43-46 and 88-98 were rejected under 35 U.S.C. § 112, second paragraph, as being indefinite. The examiner stated that the claims as written could be interpreted to cover a composition with no acidulant at all, no protein at all and/or a moisture phase acidity level of 0.

In response, claims 1, 40-46 and 88-98 have been amended to require at least some acidulant, at least some protein, and a moisture phase acidity level of greater than 0. Although, the examiner did not specifically reject claim 42, applicants have amended this claim similarly. Claim 44 has also been amended to correct a minor typographical error. No new matter has been added to the application by these amendments.

The §112 rejection of claims 1, 40-41, 43-46 and 88-98 also notes that not all of the claims specifically include ingredients to indicate the composition is an imitation cheese sauce or pudding. The Examiner noted that the recitation of "cheese sauce" or "pudding" in the preamble would not distinguish between these two items.

Applicants have noted the Examiner's finding, and have amended claims 88, 89 and 93 to include a pudding flavor. Claims 90 and 92 had already included a

flavoring that imparts a dessert flavor and claim 94 recites a sweetener. Applicants also note that claims 38, 39, 42, 44 and 95 include the features of cheese flavoring or cheese properties. As discussed below, even without the inclusion of imitation cheese sauce or pudding ingredients, claims 1, 40-46 and 88-98 are distinguishable over the prior art. The prior art does not disclose a composition of any kind, whether imitation cheese sauce, pudding or anything else, that contains the features recited in claims 1, 40-46 or 88-98. Accordingly, withdrawal of the § 112 rejection of the claims is respectfully requested.

Claims 1-98 were rejected under 35 U.S.C. § 103(a) as unpatentable over International Publication No. WO 00/70970 to Bauer *et al.*

Bauer *et al.* discloses an ionic stable emulsion sauce, which is shelf stable and has a pH of not more than 4.6. The sauce in Bauer *et al.* includes a thickener, acidulant and protein. As is recognized by the examiner, Bauer *et al.* utilizes "hurdle" technology to prevent the growth of bacteria and other undesirable organisms. See lines 1-10 on page 5 in Bauer *et al.* The hurdle technology food preservation model predicts the level of bacterial stability of a given composition, depending on the specific levels of each the four parameters ("hurdles") of pH, moisture, emulsifier phosphates, and NaCl (salt) present in the composition. Applicants respectfully traverse this rejection.

The present invention is directed to a high acid product that is outside of the limits imposed by the hurdle technology paradigm and provides a new methodology for achieving a high acid, shelf stable product, without the need for high solids and high amounts of acid. This is achieved in accordance with the invention using a high moisture content of 55% or more, a low protein content of 1% or less, and a low amount of acid of 0.5% or less.

Production-scale hurdle manufacture is limited to a narrow range of permutations of each of the parameters, and is limited to a relatively low level of moisture in the product, in order to ensure proper preservation of the resultant food product. It is noted that moisture refers specifically to H<sub>2</sub>O and does not include oils or fats, which are considered solids. In accordance with the utilization of hurdle technology, Bauer *et al.* discloses a composition that must have low water content, i.e. 20-40%. See lines 18-19 on page 7. Since water is the inverse of solids, the composition in Bauer *et al.* is in fact composed of 60-80% solids. In contrast, the present invention requires a moisture content of at least 55%, thereby conferring a significant economic advantage upon the manufacturer, who may replace the costly solids components with a less expensive moisture (water) component, while maintaining food safety.

Bauer *et al.* also discloses that these compositions that are high in protein and acid. See the Alfredo sauce example on pages 18-19, which has a total

titratable acid (TTA) level of greater than 1.15%, as compared to less than .5% in the present invention.

As a result of the low amount of protein in the composition according to the present invention, a relatively low volume of acid is needed to drop the pH to 4.6 or less. The low acid volume creates a better tasting imitation cheese or pudding, without the unpleasant, sharp, tart, sour or acidic taste characterized by the prior known compositions containing a high volume of acid. The prior art products, such as those provided by Bauer et al. all require the addition of flavor-imparting substances, such as tomatoes, onions, peppers, and smoke flavors, to mask the acidic tastes in order to make the products commercially viable. Of course, with respect to pudding, it would not even be feasible to add these flavor-imparting substances, and high acid puddings had not previously been successfully introduced.

Also, Bauer *et al.* discloses a salt content of 2-18%, and a preferred range of 8-12%. See lines 21-23 on page 7. As indicated above, salt (NaCl) is one of the hurdle parameters. In contrast, the compositions of the present invention have a low salt content of only 1-2%. This lower salt content is helpful in the manufacture of cheese sauce and pudding, especially, which retain the flavor, texture and consistency properties of conventional cheese sauces and puddings.

**Applicant:** Jacobson et al.  
**Application No.:** 09/888,818

The compositions according to the present invention are acidified using a relatively low volume of acid due to the low amount of protein in the composition, and have a high moisture content. As an acidified food, the compositions in accordance with the invention have the benefit of being shelf stable and are less susceptible to microbial spoilage by virtue of their acidic pH, in a similar manner to the hurdle technology products. However, by using less acid, they can be formulated for various tastes, including dessert flavors such as pudding, as well as for texture. The present invention also provides a great cost advantage since the products can have a high moisture content not limited by the moisture "hurdle".

Therefore, the present invention is neither suggested nor disclosed by the teachings of Bauer *et al.*, and withdrawal of the §103 rejection of claims 1-98 is respectfully requested.

If the examiner believes that any additional matters need to be addressed in order to place the present application in condition for allowance, the examiner is respectfully invited to contact the undersigned by telephone at the examiner's convenience.

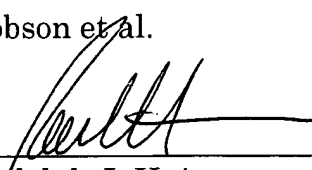
In view of the foregoing amendment and remarks, applicants respectfully submit that the present application, including claims 1-98, is in condition for allowance, and a notice to that effect is respectfully requested.

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**Application No.:** 09/888,818

Respectfully submitted,

Jacobson et al.

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